Physics

Major

Minor

Tracks in:

- TRADITIONAL PHYSICS
- ENGINEERING PHYSICS

Teaching Certification Option

	MAJOR	MINOR	TEACHING CERT. OPTION
Hours Required in Physics:	39	21	39
Hours Required in Other Departments:	22	8	63.5-64.5
Total Hours Required:	**61**	**29**	**102.5-103.5**

Professors:
Deng-Luzader, J. Hoffman, Latta, Plitnik, O. Soysal, Wang

Associate Professors:
Doyle, Teker

Assistant Professors:
Eltayeb (Chair), E. Moore

- You may not use courses listed under the heading Physical Science to satisfy the requirements of a major or minor in Physics.
- FSU and the University of Maryland Baltimore County offer a BS/MS program in Applied Physics. (See the next page of this catalog for more details).
- For engineering programs offered by the Dept. of Physics and Engineering, see the Engineering section of this catalog.
- The Traditional Physics track is recommended if you plan to attend graduate school.

Summary of Requirements for Major/Minor in Physics

Major

1. Introductory Level Courses: *(8 hours)*
PHYS 261 Principles of Physics I: Mechanics *(GEP Group C)*
PHYS 262 Principles of Physics II: Electricity & Magnetism

2. Advanced Courses: *(22 hours)*
PHYS 263 Principles of Phys. III: Sound/Light
PHYS 264 Principles of Physics IV: Thermodynamics & Modern Physics
PHYS 310 Classical Mechanics
PHYS 312 Electricity & Magnetism
PHYS 320 Experimental Physics
PHYS 491 Seminar
PHYS 492 Senior Research & Seminar *(Capstone)*

3. Required Courses in Other Departments: *(22 hours)*
One of the following:
COSC 240 Computer Science I
or ENEE 114 Programming Concepts for Engineers

All of the following:
ENES 100 Intro. to Engineering Design
MATH 236 Calculus I *(Core Skill 3)*
MATH 237 Calculus II
MATH 238 Calculus III
MATH 432 Differential Equations

4. Choice of Track: *(9 hours)*
Majors must choose a track in:
Traditional Physics or Engineering Physics
(requirements listed below)

Minor

1. Introductory Level Courses: *(8 hours)*
PHYS 261 Principles of Physics I: Mechanics *(GEP Group C)*
PHYS 262 Principles of Physics II: Electricity & Magnetism

2. Advanced Courses: *(13 hours)*
PHYS 263 Principles of Phys. III: Sound/Light
PHYS 264 Principles of Physics IV: Thermodynamics & Modern Physics
PHYS 320 Experimental Physics
One additional 300-400 level physics or engineering course

3. Required Courses in Other Departments: *(8 hours)*
MATH 236 Calculus I *(Core Skill 3)*
MATH 237 Calculus II

Summary of Requirements for Traditional Physics Track

1. Courses required for all majors: *(51-52 hours)*
Listed above.

2. Advanced Courses in the Department: *(9 hours)*
PHYS 311 Thermodynamics
PHYS 417 Quantum Physics
One additional physics elective at the 300 level or above

Summary of Requirements for Engineering Physics Track

1. Courses required for all majors: *(51-52 hours)*
Listed above.

2. Elective Hours in the Department: *(9 hours)*
With permission of the Department Chair, as many as 6 credits of mechanical engineering or electrical engineering at the 200 level or above may be applied.

Summary of Requirements for Teaching Certification Option in Physics

If you wish to complete a Maryland State approved program in teaching Physics, you must:

- Complete the BA/BS in Physics - Traditional Physics Track.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.